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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/988,968

11/20/2001

Yuji Nomura

FUJR 19.182

9653

26304

7590

12/29/2004

KATTEN MUCHIN ZAVIS ROSENMAN
575 MADISON AVENUE
NEW YORK, NY 10022-2585

EXAMINER

LEE, DAVID J

ART UNIT

PAPER NUMBER

2633

DATE MAILED: 12/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/988,968

Applicant(s)

NOMURA ET AL.

Examiner

David Lee

Art Unit

2633

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 November 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 11/20/2001.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this

Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Chang et al (US Patent No. 6,160,651).

Regarding claims 1 and 6, Chang teaches a routing control apparatus for controlling routing in a network including an optical network, the apparatus comprising: state information obtaining means for obtaining state information regarding the network (col. 4, lines 50-54; see also col. 13, lines 44-49); optical edge node specifying means for specifying an egress optical edge node located on the output side of the optical network (fig. 2 – the area from the receive optical network module 204 to the WDM node 215 is considered the egress optical edge node) and an ingress optical edge node located on the input side of the optical network (fig. 2 – the area from the transmit optical network module 203 to the WDM node 211 is considered the ingress optical edge node) to establish an optical path to a destination address (col. 4, lines 59-60: the route from the ingress node to the egress node is established); and routing means for setting explicitly routes according to destinations to the ingress optical edge node in a network connected to the input side of the optical network (col. 4, lines 59-63 and

Art Unit: 2633

col. 5, lines 2-4: the route is selected and the data is routed through the ingress node to the egress node).

Regarding claims 2 and 7, Chang teaches that the optical edge node specifying means specifies the egress optical edge node which gives the shortest route to the destination address (col. 11, lines 8-12: the route is chosen so as to minimize the 'cost', and one of the factors that the cost is based on is the total propagation distance. Therefore, the chosen route is the route with minimized propagation distance, or the shortest route.)

Regarding claims 3 and 8, Chang teaches that the optical edge node specifying means specifies the egress optical edge node and the ingress optical edge node so that a wavelength will be assigned according to communication quality (col. 8, lines 41-43: the wavelength is selected and assigned according to the desired levels of survivability, security and reliability, a.k.a the quality of the communication).

Regarding claims 4 and 9, Chang teaches that the routing means explicitly sets a route on the basis of the state of a link in the network connected to the entry side of the optical network (col. 8, lines 41-43: the route is set on the basis of how much survivability and security is desired (state of the link); see also col. 13, lines 44-49).

Regarding claims 5 and 10, Chang teaches that if an optical path established by specifying the egress optical edge node and the ingress optical edge node is judged because of low usage to be redundant (col. 14, lines 30-33, the optical edge node specifying means cancels specification instructions issued

Art Unit: 2633

to set the optical path and opens the optical path (col. 14, lines 25-26: the path is torn down and reestablished to open up the optical path; col. 14, lines 40-41: the routing tables can be altered to cancel any established specification instructions).

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Beshai et al (US Patent No. 6,339,488) is cited to show an optical network for controlling routing.

Zadikian et al (US Patent No. 6,631,134) is cited to show a method for allocated bandwidth from node to node in an optical network.

Chen et al (US Patent No. 6,501,758) is cited to show an optical network including a cross connect.


4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Lee whose telephone number is (571) 272-2220. The examiner can normally be reached on Monday - Friday, 9:00 am - 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan can be reached on (571) 272-3022. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2633

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

David Lee


M. R. SEDIGHIAN
PRIMARY EXAMINER